THE VETERINARY RECORD

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Royal Recognition.

It will delight every loyal member of the profession —and that means every member—to hear that the President of the Royal College of Veterinary Surgeons has been honoured by the presentation to him of the medal to be worn in commemoration of the 60th anniversary of Her Majesty's Reign. Except the privilege of using the *Royal* in connection with the College of Veterinary surgeons, this is, we believe, the first mark of Royal recognition or favour bestowed upon us as a Corporate Body.

Professor Penberthy should be proud to be the recipient of this honour, and we shall all feel that his decoration will be worn with dignity. Our President is our selected representative and his honour is ours. Some of us had felt a little disappointment and feared that we were about to be overlooked in this year of grace. Now we are satisfied, for although it might have given greater joy to an individual member to have received some title, the whole profession will be glad that its president has officially been recognised by Her Gracious Majesty.

A Veterinary Medical Officer.

In the opposite column is an extract from a paper by Dr. Manley, Medical Officer of Health for West Bromwich. It is well worth careful perusal, for it not only recognises the utility and necessity of a veterinary officer as a co-adjutor of the medical officer, but fairly points out the limits of the duties of each. Nothing could be worse than the attempt to exaggerate the position of the veterinarian, except perhaps the denial of his value. Dr. Manley insists that the medical man must ever have the last word in deciding what is and what is not fit for the food of man. This position is impregnable, and no thoughtful veterinarian will ever suggest that it is doubtful. We have no desire to supersede the medical officer, we merely wish to offer the technical knowledge we possess as auxiliary to his. We claim that the diseases of animals are specially our sphere, and that as some of these are transmissible to man we can afford assistance in protecting public such as no other class offer. Dr. Manley recognises our claim, and in this he agrees with such well known public men as Sims Woodhead, D'Arcy Power, Dr. Newsham, Professors Délépine, Victor Horsley, and many others. Our duty is to convert lesser lights to the same opinion, and to see that we continue striving to perfect ourselves for the position aimed at.

Public Health Appointments.

In a paper by Dr. H. Manley, M.A. D.P.H., reprinted from *The Medical Magazine*, attention is given to "the future of health appointments."

One section deals with "Auxiliary Departments" and this is what the author says about veterinarians and their duties:—

The Veterinary Medical Officer. — Mr. d'Arcy Power in his recent introductory address to the students of the Royal Veterinary College, took for his subject "Suggestions for a Veterinary Sanitary Service." The address would not perhaps have so much attracted the attention of the health officer but for a gratuitous assumption that in a properly arranged Health Department friction will be the result. The relationship between the sister professions has been the subject of previous addresses by health officers and it would be more feasible for a scheme to be prepared by those who had a practical knowledge of the working of Health Departments than by any outsider however eminent.

In considering the establishment of such a service let it be said at once that no area smaller than those of the Local Government Act, 1888, should be proposed; the emancipation from local control by small sanitary authorities will be as vital to efficient work in this as in other measures of public health. Under these circumstances the health officers of the County will at once acquire a valuable consulting colleague. Such appointments should be well paid, enjoy fixity of tenure, and instead of being given to young men fresh from the schools should be made to fill the same honoured place in the veterinary world that is accorded to a County medical officer.

The possible duties in which consultation is needed between the two officers and the points upon which the duties may overlap require careful consideration. The supervision of the food supply as far as meat is concerned, the proper and efficient inspection of dairies, cowsheds, and milkshops, for the prevention of swine fever and the measures still undeveloped for dealing with tuberculosis are those which will most readily occur to the mind.

Granted that the appointments are to be for Counties or County Boroughs it will at once be obvious that except in disputed cases the veterinary chief will not be available in meat cases. But in practice how small a proportion of these cases need a veterinary inspector! As the law at present stands I consider that the properly qualified medical officer of health is in a position to deal honestly with ninety-nine out of every hundred cases of meat which may come under the notice of his inspectors or himself. When we go beyond those cases into the disputed ground of how great a degree of tuberculosis disqualifies a carcase for human food, whether cows falling from parturient

apoplexy may safely be eaten, and how far hydatid tumours in a pig's liver condemn the whole pig, it may be safely asserted that the average D.P.H. is equal if not superior to the average M.R.C.V.S.

Given the right of consultation between the M.O.H. and a veterinary expert, with a recognised fee for each consultation, and I see no reason for any alteration in the present statute.

The administration of the dairies, cowsheds, and milkshops order has been alluded to already; it is in a most unsatisfactory state. Instead of being governed by the Sanitary Committee it has in many cases been entrusted to the Executive Committee appointed under the Diseases of Animals Act, 1894, and the D.C. and M. Order of 1884. Its inspectorial duties are in many instances carried out by police inspectors, who content themselves with the administration of the prevention of swine fever, and bestow comparatively little attention upon the equally important supervision of the surroundings affecting the milk supply, for which, indeed, they are for the most part hopelessly unqualified. Until this portion of prophylactic sanitation is in the hands of those who by training and education have qualified themselves to carry out proper sanitary measures for the denizens of the cowshed and the farm is to idle to talk about the introduction of a series of measures, however much needed they may be, for the abolition of human tuberculosis and its dissemination among the infants of the human race.

No medical officer of health has ever claimed to interfere with swine fever, though I think he would do wisely if he made himself more familiar with its symptoms and pathological appearances than appears to be generally the case among medical officers of health.

In concluding this portion of my subject I may say that the views which I have endeavoured to advocate find favour with some of the best of the veterinary profession; the best proof of this is that when I originally advocated the closer union for sanitary purposes of the two professions, and laid down the lines upon which that union should take place, without interfering with the paramount authority of the medical officer of health or the creation alongside him of a new and possibly antagonistic service, my views were received with acclamation. I may be permitted to quote one of the organs of the veterinary profession: "The writer very properly insists upon the medical officer of health being paramount in all those matters where human life and health is concerned, but he acknowledges that the special knowledge of animal diseases possessed by veterinarians should always be available for the Local Authority. We have our own special sphere of usefulness, and we have no wish to undertake more. We do, however, claim to deserve some recognition for special knowledge which is useful to the community. Not in opposition to, but in conjunction with medical officers of health, can we be of the greatest use to the nation; and we feel that we have hardly as yet succeeded in obtaining due recognition." That is the view I take, but I do not think the way to obtain that recognition, fully as I believe it is deserved, is by in any way or degree exaggerating the claims to it.

CASES AND ARTICLES.

CATS AS PATIENTS.

By H. Leeney, M.R.C.V.S.

Thank goodness the motor car will not deprive us of our cat and dog patients, however much it may succeed in displacing horses and those who minister to their wants in sickness and in health.

The cat as a patient has been much neglected in the past, but with the advent of cat shows and the establishment of a stud book, their importance and value is yearly increasing; nor do we expose ourselves to the ridicule of the footman and maidservant in these "spacious times" when called upon to see a cat.

The beautiful pets of the drawing-room and ladies' boudoir have a monetary as well as sentimental value.

Accustomed to fondling, and an indulgence which our grandmothers would have deemed sinful, they are as a rule, easily approached by a stranger, and do not threaten us as do many pampered dogs, but for all that they are fair weather friends, and quickly resent restraint except under the disguise of petting and flattery. Their vanity is their only constant quantity, and to make an examination we do well to appeal to it. If we address ourselves first to the owner instead of the patient the latter will be piqued at our want of admiration, and appreciate it the more when we presently approach with honeyed words and that intonation of the voice which at once ingratiates us into the favour of both patient and nurse.

The cat is essentially oriental and hates flurry and bustle, with what contempt she regards dogs tumbling over one another in rude and boisterous mirth while she poses gracefully on the softest cushion in the softest of chairs. She must be approached delicately, and handled tenderly until assured of our good faith, and an examination may then be made which, if required at Camden Town, would necessitate a prolonged inhalation of A.E.C. or other hypnotic. If we are "fair spoken and persuasive" we can even perform minor operations with but very little restraint.

In speaking of method of restraint it may be permissible to remark for the benefit of beginners that there are several ways of holding pussy without assistance.

If we take her by the skin of the neck and *don't* hold her off the table or floor, but on the edge of any solid piece of furniture, she will give all her attention to jumping off it, which can be prevented with a minimum of pressure, while many things can be done.

The writer would not have ventured to speak of this simple means if he had not seen a lot of feline practice without discovering it. It was shown to him by a so-called "quack" who demonstrated his capacity to castrate a mature animal without assistance. The head of an upholstered sofa is best for the purpose, but the ordinary deal table found in

kitchens answers well enough, the nails being dug into it in the effort to jump off, with never a thought of scratching or biting.

In the absence of other appliances, a soft Turkey towel, a large woollen wrap, or the table cloth may be used when the head is to be examined, a tooth extracted, or fish bone removed. If wrapped well round the neck, almost anything can be done to a cat's head, but are we not inclined to over estimate the danger of scratches from cats and think too little of those from dogs?

I confess to have had the worst scratches from dogs, and to being occasionally bitten by cats from this cause. Quite recently one of my assistants had his arm badly lacerated by the nails of a chow dog.

The administration of medicines has been always a difficulty, and a few hints may be acceptable.

Although a dainty feeder and not to be deceived by a bolus, however neatly concealed in a *bonne bouche*, pussy may be tricked into taking medicines without resort to force. If she is really ill, she will not lick butter and cream off her knees and toes, but anthelmintics may be given in such media. Bulk must be kept down, and nausea not excited or it may never again be allayed. I declare with conviction that I have seen cats killed by nothing more than the nausea excited by clumsy attempts at medication.

Pills are difficult to give, and each more so than the last; powders are resented with equal force, and oils excite nausea more readily than either. This restricts us almost to aqueous fluids, though we may here remind readers that injections per rectum are not so much resented as the tyro in cat doctoring would suppose. The pronounced flavour of sardine oil enables us sometimes to give a little castor oil or other aperient in it, if our patient has the inclination to take food. Unfortunately this is seldom the case when we are called upon to treat cats; they cannot be persuaded to eat to please their attendant, and it is useless to excite their jealousy by threatening to give the morsel to another cat or dog. No; when a cat is seriously ill she wishes to be let alone, and will die without appealing for aid or sympathy.

For many years I thought it useless to force food down the reluctant throat of a cat that I deemed incapable of digesting it, but have had to alter my opinion after seeing several examples of animals brought from the verge of death back to life, and eventually to health by spooning down bovril. Like a convert to a new faith, I have now come to regard nourishment as the essential thing in the treatment of feline patients.

Concentrated medicines are a great aid to us, especially the tabloid, soluble in so small a quantity of water that one may get a dose into the patient without her knowledge. If we caress her face and chin, dipping a finger into the solution and wetting her lips with the medicament it is only a question of time to get the ten, twenty, or thirty drops taken without in the least exciting the patient.

Those who have had much experience of cats will agree that they are very bad travellers. Accustomed to freedom, and therefore disliking the confinement of a box or hamper, annoyed if not frightened by dogs, and perhaps wilfully teased, they reach their journey's end in anything but an amiable frame of mind and indifferent to food. Here is a department in which the woman veterinary surgeon will easily excel us. There are "sleeping partners" already who conduct this part of the business better than their lords, they know that a cat wants first to be caressed, not fed, but that the appetite will be awakened when the emotions have been first appealed to and the traveller's anxieties laid to rest.

Of all the unsuitable places for a sick cat that one can think of, it is the dog infirmary where a few cages more cramped than the rest are set apart for feline patients. Besides the barking of dogs which excites the natural watchfulness of the cat, it is a fact that pussy will never settle down where she does not know the beyond. Your own new purchase, received with effusive joy by the family will not be content until she has explored the premises. She may have dined to repletion and entertain a contempt for mice, but so long as there is a cupboard she has not visited, she will watch till opportunity is afforded to ascertain what is inside. These characteristics make her the worst of captives.

If the practice is not sufficiently extensive to permit of a special apartment for cats, a box in the kitchen is the best place, for them at any rate. Cats are accustomed to the sights and sounds of this part of a house, and soon becomes reconciled to confinement.

I would anticipate objections to the above practice by saying that a veterinary surgeon should never engage a domestic servant who is not a lover of animals; girls who like cats will render service which money cannot procure.

For carpeting a box of the kind referred to, paper is the best material, it can be constantly renewed, and unlike sawdust or hay, does not adhere to the coat. The pan of earth should have been previously soiled by another cat to ensure the new tenant's good behaviour. Tate's sugar boxes when fitted up with a wire front cost only a shilling or fifteen pence, and can be destroyed upon the slightest suspicion of infection. Short of destroying them, I have found the most thorough disinfection by saturation with petroleum and permitting a good blaze, only arresting the process when the surface is well charred. This melts the solder of the wire netting and necessitates a few repairs which are easily and cheaply effected.

With a large experience of infirmaries I am strongly opposed to them. No great number of carnivorous animals can be brought together or permitted to succeed one another as occupants of benches and cages without infection. It is only a question of time when a case of husk or distemper is inadvertently admitted, and no form of disinfection is thoroughly satisfactory.

Cattle Plague in Central Africa.

It seems that rinderpest in its spread southwards left some active contagion on its way. The *Central African Gazette* reports that the disease has made its appearance among the game in the West Shire and Ruo districts. Let us hope this warning will not be forgotten by the authorities.

MEAT INSPECTORS.

By Frank W. Garnett. M.R.C.V.S., Windermere.

I was amused, if one can be amused at all by ignorance displayed in others, and more especially by the ignorance of councillors representing public bodies, in relation to matters affecting the health of animals and the inspecting of carcases at public abbatoirs.

The question of meat inspectors at Crewe in your last number brings this forcibly to notice. The whole case as reported would be a rich farce—the committee of butchers, the indignation of the medical officers of health, and the wise (?) words of the councillors—were it not for the one consideration that by its performance the health of the public was jeopardised. Yet this is not an isolated instance of ineptitude displayed by public bodies, but a true specimen of what takes place in nearly every council when such matters are under discussion.

The great majority of Councillors would say at once, if asked outside the council chamber, that the M.R.C.V.S. is both by training and education the only fitted person to inspect cattle in health or disease, and not one of them would dream of sending for any other person if their own animals required examining; but when the question of public health in relation to diseases of animals is brought forward at their meetings the invariable answer is the M.O.H. butchers, shoemakers, or any other person but the veterinary surgeon. The result of such a state of affairs is in the main attributable to custom. The heredity of custom having such a strong hold on the mind of the serving councillor that he throws common sense to the winds, and thinks he is safeguarding the public health best by appointing the above mentioned M.O.H. etc. as inspectors.

It is a deplorable fact, yet nevertheless a true one, that the veterinary profession is to a certain extent responsible for this state of affairs—it has hidden its light under a bushel, it has never grasped its true position on the great question of public health, as is proved by the position it holds at the present time, or disputed the medical man's competency to examine cattle; and by its passive adhesion to the present state of affairs it has given its assent to what everyone knows to be an absurdity. How long is this to continue? Can no combined effort be made in the interests of public health if not in the interest of the veterinary profession to remedy the matter? Is it possible that such a question is outside the province of the R.C.V.S.? A gentle reminder from that august body sent to every public authority in the realm, drawing their attention to the matter, would do some good by bringing the absurdity before the public mind. Or a bill drafted by our solicitor and placed in the hands of a member of Parliament who has the interest of public health at heart, could do no harm, and might be the means of infinite good if incorporated with it were a clause compelling public bodies to appoint veterinary surgeons as Inspectors of abattoirs and cow sheds.

I consider that this is the most important question facing the veterinary profession of the present time, and one worthy of consideration by all its members.

UNRECOGNISED DISEASE IN HEIFERS.

By J. R. R. Hamilton, M.R.C.V.S., Lisburn, Ireland.

I wish to report the following cases of a disease on which I should like to have the opinion of some of your readers, and it may also be of interest to them.

Last spring I was called to attend a cow, the property of a farmer in this neighbourhood. Her time was very near due for calving, and she presented the appearance of stomach derangement, appetite fitful and rumen full, loss of cud, etc.. etc.

I treated her with mild purgatives and stomachics and she improved for a few days, but then began to go back to the old state. About a week later I was called on to attend her calving and delivered her of a dead calf (fully formed). I again visited her a few days after and found her very poorly, suffering from hydrops-uteri a quantity of fluid coming away on manipulation. She lingered about a week and died. I then learned that he had a heifer die some months previous, but I did not attach any very special importance to the matter till some time later, when I was called to see two heifers of his which were very poorly. They presented symptoms similar to the cow, but were not with calf; they had a discharge of yellow-whitish matter from the vulva and occasional straining. They both died and I made a post-mortem on one of them, but found no special mark of disease in any organ. Two others of his heifers were slightly affected in the same way but as they did not get bad he was able to dispose of them, and he cleared off almost all his stock.

The symptoms in the above cases (with the exception of the discharge from the vulva) seemed to me to point to some form of poisoning through the food or water, but on enquiry in that direction nothing could be traced. Then the alternative suggested itself that the causal agent must be some sort of bacterium and accordingly the premises were disinfected.

During the summer months the few animals he had left were at grass, and the only casualty which occured was that one heifer aborted.

But about 3 or 4 weeks ago he again called me to attend to a cow which he had bought a few months previously and which then became unwell. She showed symptoms very similar to the former ones and is gradually sinking. Another heifer is unwell too, and has just passed some blood from the vagina. I have tried various treatments (but principally antiseptics) with about the same results.

I may mention that several other veterinary surgeons have inspected the animals, but gave no definite opinion.

If any of your readers have come across like cases I should be very glad to hear from them. I regret we have not a veterinary society here to discuss the matter. I did not take notes of the cases, so I trust allowance will be made for these disconnected remarks.

EXTRACTS FROM FOREIGN JOURNALS.

Treatment of Grapy Grease with Chromic Acid.

In two cases of verrucose phymatosis or grapy grease with abundant greasy discharge Fröhner, after having tried various other treatments without results, had recourse to chromic acid which very quickly brought about important improvement. The chromic acid in a 10 per cent. aqueous solution was applied by means of a brush every two days, and afterwards the affected parts were covered with a dry dressing. The day following the secretion diminished considerably and improvement was regularly established until complete dessication was obtained. Meanwhile, as the dry dressings became useless they were replaced by application of an absorbent powder composed of zinc. oxide and talc 1 in 2.

The following notes are given on the different treatments successively employed in both these cases previously without obtaining real benefit: (*a*) Daily creolin baths, followed by dry dressing; (*b*) daily dressing with tannoform; (*c*) daily paintings with a 5 per cent. aqueous solution of picric acid, dry dressings, and hypodermic injections of *arecoline*; (*d*) painting with a 10 per cent. solution of sulphuric acid; (*e*) painting with tincture of iodine; (*f*) cauterization with 8 per cent. of zinc chloride, or 10 per cent. of silver nitrate in alcohol; (*g*) antiseptic washing with sublimate.—*Monatsh. für prak. Thierh.* VIII. *B.*, II. *H.*, *1897.* *ex Annales de Médecine Vétérinaire, Bruxelles, Dec., 1897.*

(The translator has seen good results following the use of zinc chloride solution (Burnett's) 1 part, water 5 parts applied by means of a piece of sacking worked in a see-saw fashion round the affected parts of the limb, the hair and grapes having been previously removed with a sharp knife or actual cautery. But individual skill and perseverance have as much to do with the success in these cases as the drugs used.)

Camphorated Alcohol Dressing.

Inspired with the favourable results obtained in man by the dressings of camphorated alcohol (camphor 1 part, rectified spirit 7 parts) in the treatment of phlegmons, lymphangitis, boils, etc., Fröhner was led to try the method in his practice; only, instead of the ordinary camphorated alcohol, which irritates the skin of the horse, he employed a mixture of equal parts of camphorated alcohol and alcohol, that is to say a 20 per cent. alcoholic solution of camphor. With this antiseptic agent one can dispense with the frequent renewals of the dressing; it suffices to soak it from time to time with the camphorated solution. Fröhner, in certain cases, has allowed the applications to remain *in situ* for a week without even touching them. It is chiefly in recent phlegmonous inflammation and tendinous synovitis that he has obtained the best results. In lesions of the fetlock produced by blows from the calkin, for example, Fröhner applies, as soon as possible, a bandage around the pastern to the knee and soaks it with camphorated alcohol. If it is of a suppurative form, the camphorated dressing itself appears yet to be the best after the abscess has been opened. He employs at the same time hypodermic injections of pilocarpine or, what is better, arecoline as an adjuvant agent for resorption, when a considerable effusion of synovia is present. He considers that camphorated alcohol itself is insufficient in chronic synovitis, accompanied with induration of the surrounding tissues.—(*Ibid.*)

Reflex Functional Disturbances of Peritoneal Origin Observed during the Evisceration of Animals Profoundly Anæsthetised.

MM. L. Guinard and L. Tixier, in a note presented to the Academy of Sciences, August, 2nd, 1897, say the aim of these researches has been to cause and to record certain reflex phenomena of peritoneal origin, produced under conditions resembling as much as possible those occurring in practice, in order to have some indications upon the physiological phenomena which accompany or create that pathological state well known to surgeons under the name of *shock*. These experiments made upon dogs absolutely verify the conclusions arrived at by Goltz, Vulpian, and others establishing that the peritoneum may be the point of departure of a series of reflexes acting on the heart and respiratory organs. From a surgical point of view the result of these researches are the following:

1. The state of shock is revealed by physiological signs which, when registered, correspond exactly to the symptoms observed in practice.
2. Evisceration occasions some conditions very favourable to the production of shock.
3. In individuals whose peritoneum is not inflamed evisceration can be executed without danger, provided that the heart is healthy. It should not be prolonged beyond a quarter of an hour.
4. In those individuals whose peritoneum is diseased (peritonism, peritonitis, intestinal occlusion) evisceration is dangerous in consequence of the acuteness of the reflexes of which it is the point of departure.—*Revue Vétérinaire, Dec., 1897.*

[We note these so-called "researches" with disgust.—Ed.].

Pleurisy and Thoracentesis.

M. Jobelot, of the Saumur Cavalry School, treated six cases of pleurisy of the horse by thoracentesis; by the operation being carried out under the necessary antiseptic precautions it was rendered inoffensive. It was practised as soon as pleurisy was *diagnosed*, and renewed as often as was judged necessary. Four cases by this means were rapidly and completely cured, it is said in consequence of early interference! —(*Rec. de Médecine Vétérinaire, Nov. 30th, 1897*).

[Possibly success would have been obtained without this surgical intervention.—*Trans.*]

The Nervous Nature of Eczema.

M. Lassartesse considers eczema to be a dermatoneurosis, and that in its etiology the herpetic diathesis, predisposition (breed), food, microbes, and finally the nervous system play an important part. This idea originated with Lancereaux who considers herpetism as a disturbance of nutrition due to a per-

version of the nervous system. Brocq, Breda, and Leloir admit a complex etiology, with the nervous influence dominating. They admit the action of hereditary predisposition, of intoxications of digestive origin, and of alimentary regime. In the canine species, a vicious regime leads to obesity, which often co-exists with chronic bronchial catarrh, otorrhœa and chronic eczema, and all of which are manifestations having a nervous influence for a common cause.

Psychical super-excitement maintained in certain breeds (braques,* blood hounds, coursing dogs, etc.) explain their predisposition.

The author bases these considerations upon three observations observed on dogs affected with distemper. They shew that a similar infection may give rise to nervous disturbances of very varied forms. These are choreic, paralytic, and also cutaneous complications. When the nervous lesion is compatible with life, one may see a cutaneous motor disturbance, erythematous patches, vesicles, great pruritis, that is to say eczematous manifestations.

Picric acid in a saturated solution (1-86) is an excellent medicament in the treatment of eczema, two applications bring about successful results without fear of intoxication. Solution of permanganate of potassium 1 or 2 per cent. is advised to calm the itchiness.—(*Revue Vétérinaire, July, 1897, ex Journ. de Méd. Vét. et de Zootechnie, June, 1897.*)

*(Pointer class of dog).

[Eczema has been considered by dermatologists of late years to be due to a diplococcus and that it is, under certain conditions, contagious. That hereditary predisposition, feeding, housing and *bedding*, play an important part in its causation no one having had much experience of canine practice can for one moment deny. Some dogs for the first eighteen months or two years of their existence seem very liable to a recurrence of it; after this it disappears for years, to reappear again in old age. Rough coarse haired dogs seem more subject to the affection.—TRANS.]

Septuple Gestation in a Cow.

M. Pasetti, veterinary surgeon at Melzo, Italy, reports the case of a cow aborting seven fœtuses at one time. The beast was aged 7 years and at the four preceding gestations gave birth to a single calf. In the above instance she had been pregnant 200 days, and the abdomen was larger than of other years, but without having attained an exaggerated volume. The fœtuses were expelled in two efforts, three at one expulsion and four at the other. Four were males and the others were females, and the sexes were alternated in the order of succession of their birth.

Their mean weight was 7 to 8 kilogrammes. The cow died on the third day. Fleming had already reported a similar case observed by Kurds (*Clinica Veterinaria* Nov. 13, 1897, ex. *Revue Vétérinaire*, Dec. 1897).

(On referring to the 2nd edition of Fleming's *Veterinary Obstetrics* (1896) the translator finds on reference to this latter remark. Perhaps it is recorded in the Italian edition of this work).

A few Remarks on the Paralysis of the Crural Nerve and that of the Radial Nerve in the Horse.

Having had the occasion of witnessing several cases of these peripheral nervous paralyses and made some post-mortem examinations of the subjects affected, Fröhner says that the paralysis attributed to the crural nerve and the majority of those that depend on the radial nerve, are not paralyses of nervous origin, but chiefly myopathic paralyses. Also he proposes to replace the classical appellations by the terms *paralysis of the crural muscles* and *paralysis of the olecranian muscles.*

Of 12 cases of crural paralysis, Fröhner counted 4 cures, 3 improvements, 4 slaughtered and 1 death. In 11 cases, the paralysis was unilateral and only the remaining case was double. The certain cause of the complaint was hæmoglobinuria in 8 cases; once the paralysis succeeded a phlegmon of the stifle; once it was caused by straining whilst the horse was hobbled for castration; and twice the cause of the paralyses was not established.

In two cases of postparaplegic paralysis, autopsy shewed that they were questions of parenchymatous myositis with acute degeneration, and the crural nerve did not present any appreciable lesion. This view conforms however to the opinion of the author as to the nature of hæmoglobinuria, which he does not consider as a nervous disease.

Muscular paralysis without hæmoglobinuria is rare, it depends upon a distension or a rupture of the muscular fibres in consequence of the strain put upon the region of the stifle, or rather it results from overwork of the crural muscles with degeneration and rapid atrophy.

The prognosis of this crural paralysis varies according to the degree of the muscular lesion. Frequently complete cure is produced in a few days, but in the majority of cases, even if the paralysis is unilateral, the complaint is incurable, especially in cart-horses, The degeneration of the muscles leads to their atrophy in spite of all treatment, even when prolonged for months. Massage, injections of caffein and veratrine, electricity are hopelessly inefficacious. Only once did Fröhner see a cure supervene in a cart horse, and that after 6 months treatment.

As to radial paralysis, Fröhner does not deny its nervous origin in the case where the motor cord has been injured, as, for example, in traumatisms with or without fracture resulting from falls, blows, and pressure on the region of the shoulder. He has himself observed several cases, notably, as accidents during the casting of animals for operation. However, the majority of his observations of radial paralysis, whether unilateral or bilateral, were recognised as caused by hæmoglobinuria or excessive strains.

In two cases of the kind, autopsy revealed parenchymatous myositis without lesion of the cord or radial nerve. (*Monatsh. fur prak. Thierk.* viii B. 11 H., 1897, *ex. Annales de Médecine Véterinaire*, Dec., 1897.

(The author says nothing about fracture of the first ribs as a cause of radial paralysis, and his views in general of these paralyses correspond with those of Williams.) H. G.

Royal College of Veterinary Surgeons.

THE COMMEMORATION MEDAL.

"HER MAJESTY THE QUEEN has been graciously pleased to present to Professor Penberthy, President of the Royal College of Veterinary Surgeons, the medal to be worn in commemoration of the 60th anniversary of Her Majesty's Reign.

DECEMBER EXAMINATION 1897.

The written examination was held in London on the 10th, and the orals and practicals on and between the 13th and 16th December. The following gentlemen passed their final examination and were admitted members of the Royal College of Veterinary Surgeons:

Mr. F. Crowhurst	Mr. C. M. W. Park
R. C. Cochrane	W. G. Taylor
F. C. Hobbs	W. Murts
A. J. Head	F. W. Trydell
G. H. Kitchen	J. H. Hulseberg
P. Lloyd *	H. M. Durrant
H. O'Neill	R. S. Collihole

The following passed their third examination:

Mr. E. A. Batt *	Mr. A Hudson
R. C. Bell	C. H. Jolliffe
D. Crole	F. H. Ingersoll
O. S. Fisher	J. McLeod *

Mr. T. J. Symes.

The following passed their second examination:

Mr. R. Burt	Mr. B. L. Lake
C. R. Copp	G. V. McNaboe *
F. W. Cousens	J. C. Munby *
C. H. Coombe	H. Moseley
J. W. Flanagan *	C. E. Steel *
C. G. Hearn *	A. Spicer †
G. T. Jackson	

The following passed their first examination:

Mr. W. G. Evans	Mr. S. H. Howard-Jones
J. G. Fitzgerald	G. May
R. E. Mosedale	C. E. Turtill
R. J. Sargent	H. E. Whitmore *
T. W. H. Thomas	S. J. Young

Marked thus * passed with 2nd class honours.
" " † " 1st " "

ARTHUR WM. HILL, *Secretary.*

EXTRACTS AND NOTES.

EMPIRICISM OR SCIENCE?—ANÆSTHETICS.

Extract from a paper read before the Society of Anæsthetists on Nov. 18th, 1897.

By DUDLEY W. BUXTON, M.D., B.S., M.R.C.P. Lond.

The final epoch of the scientific work of the fifty years of chloroform now completed is grouped about the Hyderabad Commissions and much of the splendid research owes its origin directly both to the munificence of the Nizam of Hyderabad and the enthusiasm of Surgeon-Lieutenant-Colonel Lawrie, while owing indirectly to the same source very much of the later and valuable work of the past few years has been called forth by the Commissions. MacWilliam's research on Paralytic Distension of the Heart, Gaskell and Shore's report on the Physiological action of Chloroform (1893), Hare and Thornton's Study of the Influenc of Chloroform upon the Respiration and Circulation, and Leonard Hill's research upon the Influenee of the Force of Gravity on the Circulation of the Blood and the same worker's brilliant address delivered before this society early in the present year, and Waller's ingenious investigation into the Action of Narcotic vapours on Nerve Tissue have advanced our knowledge of the physiological action of chloroform by leaps and bounds. The excellent clinical work which had been done and recorded by Snow, Sibson, Nunneley, Richardson, Clover, Sansom, and more recently by the British Medical Association and *The Lancet* Commissions had enabled us to guess at the behaviour of this potent narcotic while the research work, a rapid glance at which has been attempted in the earlier portion of this address, confirmed the conclusions of clinicians, yet as these authorities differed it was difficult to reconcile the results. With the more recent experimental work, although a certain variation in conclusions exists the actual facts are all automatically recorded and are open books for all to read and form an opinion upon. It is impossible to attempt a detailed account of the methods adopted in the research undertaken at Hyderabad. Suffice it to say the animals subjected to chloroform were placed in as nearly a parity of circumstances with human patients as possible. Briefly, the position assumed by the Commission was—(1) that chloroform always produced a fall of blood-pressure, and (2) that under sufficiently diluted vapour the respiration, the action of the heart, and the rhythm and force of the pulse remain unaltered. When variations in the gradual fall of blood-pressure, the performance of respiration, and in the action of the heart take place they are due to direct overdosing or to overdosing through abnormal or irregular respiration. While overdosage cannot occur it was contended that if certain simple rules were followed and the state of respiration be accepted as the one and only criterion of the degree of chloroformisation, it was advanced that when an overdose was intentionally given the animal died but never through any circulatory disaster. In all their experiments in which the animals died the respiration failed before the heart. They were led to believe that surgical shock was completely abrogated by the use of chloroform, nor did they admit that accumulation of chloroform ever took place in the blood so long as the respiration remained free. Lastly, they denied that the muscular tissues were directly affected by chloroform but only through gradual and progressive narcotisation of the nervous centres.

The theory of the action of chloroforu thus built up becomes attractive and simple. Give chloroform highly diluted with air it will gradually lessen blood-poessure so that the circulatory system becomes an automatic check system, lessening and lessening the rate at which the narcotic is carried to the central nervous system and so safeguarding the organism from harmful over-narcotisation. As the nervous centres pass under the influence of the chloroform the various phenomena of paralysis occur in the order described by Majendie, Flourens, and Longet and the medullary centre presiding over respiration at length is put to sleep. When breathing stops the blood fails to circulate through the lungs, the heart becomes affected, its intrinsic vessels empty, and as it grows more and more anæmic its action grows more and more feeble and at last fails. If, however, the necessary condition of free respiration is non-existent this procession of events does not take place. Permit anything to occur which causes asphyxial phenomena, says the Commission, and you at once bring about vagal action. The heart stops, the blood-pressure lowers. This state of affairs is, however, a blessing in disguise. It is, in fact, a series of

protective reflexes which prevents the excessive dose of chloroform entering the nervous centres; when it passes off which it will always do, this inhibition will be found to have saved the patient's life.

The theory thus perhaps somewhat badly expressed has been severely criticised, has been tried in the balance by some and found wanting. No doubt if the Commission's premises are admitted their conclusions remain sound enough. It is upon the question of fact and not of theory that issue has been joined. Starting with the blood-pressure, all admit that it is lowered by chloroform. The Commission believe that this is due not to heart failure or to vaso-motor paralysis, and is of its nature pre-eminently protective. The lowering of blood-pressure, if not due to vagal stimulation or dulling of the medullary centres, must arise from vaso-motor paralysis leading to emptying of the arteries into the veins—"the loss of arterial tone" of Snow—or to failure of the heart itself. Recent observers have asserted that one or other or even both these are contributory causes which bring about the result and base their assertions upon experimental evidence. Chloroform has certainly been shown to depress the vitality of protoplasm in weak vapour while a strong vapour will destroy it totally. The blood corpuscles and the muscular tissue both striated and non-striated are also affected by chloroform. The work of Lorraine Smith seems to lend colour to the suggestion that the corpuscles are so influenced as to lessen their power of conveying oxygen to the tissues. Ringer and others have shown that the frog's heart removed from all nervous influence is gradually paralysed by very weak chloroform solution perfused through it and that eventually it loses all contractility. MacWilliam in a most striking series of experiments has striven to prove that, quite independently of all complicating circumstances such as asphyxia, partial or complete, all strengths of chloroform act directly upon the heart muscle causing paralytic dilatation. At a certain point this dilatation becomes incapable of correction, the heart then no longer contracts, and the circulation fails. This cardiac dilatation further occurs independently of vaso-motor action and determines a gradual failure in the force of the heart beat from quite the commencement of the inhalation. This must lead to impoverished blood-supply not only to the heart muscle itself, but to the various nerve centres concerned in the mechanisms of life. It must be remembered that section of the vagi makes no difference to this dilatation, nor can the old theory of pulmonary engorgement due to vaso-constriction explain the condition.

Although Dr. Lauder Brunton, it may be presumed, holds in the main the views of the Hyderabad Report, which he signed, yet his more recent contributions to the discussion appear to show that he with Hare and Thornton considers that when any asphyxial phenomena are developed such as would ensue upon weakening of the respiratory centre the animal may die from circulatory failure before true respiratory narcosis supervenes. The weak point in this position is that while everyone from Snow downward has conceded the necessity for free dilution of chloroform vapour and the avoidance of any asphyxial phenomena the crux has always been how to avoid the vascular depression. The Hyderabad Commission frankly accepts the position by denying that vascular depression ever entails danger; but Hare and Thornton, Gaskell and Shore, and all recent workers not only hold the opposite view, but actually point to the Hyderabad tracings in support of their assertions. It is the clinician, who is not always a *persona grata* to the physiologist, who now steps in and assures us that it is practically impossible to say who has a healthy heart or shall we say who has a resistive heart. Abuse of living, hard living, scanty diet, terror, wasting disease, are factors in the problem which face the anæsthetist, but, like Gallio, the physiologist cares for none of these things. Hare and Thornton in their report say: "The variation in the action of a drug on a diseased individual from its effect on a normal one is notorious, and we have no right to dogmatically assert that there is no danger of circulatory depression in man even if we found no evidence of failure in dogs, because there may be many idiosyncrasies or variations, through disease in the human being which may completely reverse the results of experiments on healthy animals." They find from a long series of expesiments that "gradual cardiac failure never occurs without producing respiratory changes from the very first." But of course all who have experimented upon the lower animals and have given chloroform to the higher readily admit this It is not the gradual but the rapid cardiac failure which is to be feared. Leonard Hill, however, has been led to modify the view that respiration fails initially while circulation is subsequently and consequently paralysed in chloroform death. His experiments go to show that when chloroform is inhaled the arterial pressure falls rapidly and as it touches a certain point near the zero line respiration ceases. On removing the chloroform the arterial pressure slowly rises from the excitation of the asphyxial blood and respiration starts again. It is the fall of blood-pressure due to circulatory depression which leads to respiratory failure, since the medullary centres no longer supplied with blood cease to perform their work and breathing ceases. In this view artificial respiration, our sheet-anchor in chloroform emergencies, is valuable not so much by virtue of its power to aerate the lungs, but because it pumps the blood from the lungs into the left heart and so into the coronary vessels. Hill concludes that spinal bulb anæmia from lowered arterial pressure is the cause of respiratory failure as is shown by the fact that raising the arterial pressure always leads to retnrn of respiration. He makes this important point! "The depth of anæsthesia depends as does the paralysis of the respiratory centre on the primary fall of the arterial tension."

"There are two forms of chloroform syncope: (*a*) During primary anæsthetisation the patient struggles, holds breath, raises the intrathoracic pressure, congests his venous system, lowers his arterial tension, and finally takes deep inspirations and surcharges his lungs with chloroform. In the first stage the heart becomes impoverished, in the second stage it is suddenly filled with blood. This is drawn from the lungs and is full of chloroform. The chloroform passes into the coronary arteries and the heart is thrown into paralytic dilatation. Respiration and the pulse either cease simultaneously or the pulse before respiration. (*b*) During prolonged anæsthetisation this arises from gradually giving chloroform to too great an extent. The arterial pressure falls lower and lower, and secondarily the respiration ceases because of the anæmia of the spinal bulb. The heart is not in this case paralysed by chloroform because the drug is taken in gradually by the shallow respirations and distributed slowly by the feeble circulation." Waller has further shown in a series of very beautiful experiments, many of which I have had the advantage of seeing, that chloroform acts powerfully upon nervous tissue. It not only reveals a strength of action seven times that of ether, but very rapidly destroys the irritability of the structure. It is interesting to see from these experiments that chloroform stands forth declared the most potent and therefore most lethal of anæsthetics. As Simpson had almost prophetically said in 1847 chloroform combined within itself almost infinite powers for good and evil. All the work of fifty years has but taught us that in spite of the advertisements of instrument makers and the assured utterances of doctrinaires chloroform is in all hands a dangerous anæsthetic. The teaching of fifty years, the teaching, I would say, rather of Snow than of Syme, still remains unshaken. To give chloroform safely we have to first dilute our vapour and

then observe that even the diluted vapour is not inhaled too rapidly. Lawrie has said: "The Hyderabad Commission's work proves that, while Syme's principles are right, there is no such thing as a safe method of chloroform administration. It is no longer a question of the superiority of the London method or of the Edinburgh method; absolute safety can be obtained neither by watching the respiration nor the pulse for signs of danger, which are in either case proof of improper administration or of overdosing. Moreover, overdosing may take place whether the anæsthetic is given on lint or on a towel or on a cap such as we use, or with Junker's or Skinner's or any other form of apparatus. The all-important point is that the breathing shall never be interfered with in any way. Safety under chloroform can unquestionably be ensured, but it can only be so by attending to regular natural breathing; and whatever method is employed no one can deny that it is the bounden duty of the chloroformist to maintain natural breathing throughout the whole period of administration.

What, then, have we to show for these fifty years of work? Are deaths less frequent from chloroform? Do we understand its physiological action better? Are we mere blind leaders of the blind working empirically with a drug of which we know little, inhaled into and acting upon the organism in a way of which we know less. I venture to say the answers to all such questions are at least re-assuring. Unhappily we cannot say the mortality as a whole is less. Many circumstances account for this. In the first place a regrettable familiarity with the stoppered bottle and the always accessible towel or handkerchief has relaxed the sense of responsibility which once the giving of chloroform entailed. It has been wittily said that even the youngest of us make mistakes, and certainly very many fatalities under chloroform would be prevented if only experienced persons were called upon to use chloroform to produce surgical anæsthesia. Again, the methods in vogue are usually faulty. The accomplished chloroformist will use the rudest means of bringing about chloroform sleep with impunity, but to leave the dose of anæsthetic and the degree of dilution to the judgement of the inexperienced house surgeon or dresser is to court disaster. No doubt the teaching of Syme and the practice of Lawrie are absolutely sound—their results prove it; but so did the results of Snow support his teaching that the sitting posture was as safe for chloroform inhalation as the recumbent; so did the results of Clover, who at one time gave chloroform from lint and covered the patient's head and shoulders with a towel, a procedure which Snow did not hesitate to condemn. But all these methods depend upon the individual who pursues them. To the average equestrian the performances of the circus rider are feats of danger and bristle with endless chances of accident and death. So is it with chloroform. Unless I have failed utterly in my endeavour to place before you the light and leading of the past fifty years you have realized that chloroform has been proved beyond dispute, alike by its friends and its foes, to be a most powerful and therefore most perilous drug. Therefore, unless you can make all chloroformists as expert and as conscientious as Simpson, Snow, Syme, Clover, and Lawrie, you must either restrict the use of the drug to those who at least have such responsibility as engenders care, or supply better methods than those which leave so much to the personal intelligence of the chloroformist.

Royal Veterinary College of Ireland.

A meeting of the Board of Governors of the Royal Veterinary College of Ireland was held on December 16th in the Council Chamber of the Royal Dublin Society, Leinster House.

CHINOSOL AS A DISINFECTANT.

Extract from a report by Dr. E. KLEIN, M.D.

The substance "Chinosol" was submitted to me for testing its disinfecting power in powder-form and as tablets on microbes.

The substance is readily soluble in cold or warm water (tap water or distilled water), and forms a bright clear yellow solution. Even a solution of 1 : 100 is perfectly limpid, and has a slight aromatic smell, a slightly astringent taste, and produces in the mouth a slight rapidly passing burning, or rather smarting. Weaker solutions have no unpleasant taste. On the skin it produces no unpleasant effect; it does not smart and does not discolour the skin. In order to test the disinfecting power of solution of Chinosol I have chosen the staphylococcus aureus, the bacillus coli and spores of bacillus anthracis. As is well known, the staphylococcus pyogenes aureus is a common microbe of wounds and purulent inflammation. It possesses also a considerable resistance towards obnoxious influences, greater than most non-sporing pathogenic bacilli. Owing to its importance in surgical respects, and owing to its high resistance towards disinfectants, it is a suitable microbe for experiments testing the value of a disinfectant.

The bacillus coli was chosen on account of its wide distribution. It is, *par excellence*, the microbe of fæcal matter and sewage, it is widely distributed in towns, and it possesses also a considerable power to resist disinfectants. This power of the bacillus coli is somewhat greater than that of bacillus of typhoid, and to a considerable degree greater than that of most known non-sporing pathogenic microbes, as of the bacillus of diphtheria, of influenza, of glanders, of swine fever, of bubonic plague, and of non-sporing anthrax bacilli.

It follows from this that if a disinfectant in a certain strength, and after a certain time of exposure or action is capable to kill the stapylococcus aureus and coli bacillus, provided these are used in an active and fully vigorous condition, this same disinfectant would, under the same conditions, with certainty be capable of killing the less resisting microbes. In all experiments of this kind, in order to obtain a fair estimate of the disinfecting power of a substance, it is necessary that two conditions should be complied with:—(*a*) the microbe to be experimented on should be fully active and of full vigour. It must be obvious that if a non-sporing microbe be taken from an old, less vigorous culture or from a culture which, owing to the nature of the medium, temperature, etc., is not a suitable one, *i.e.*, in which the microbe is not growing under the most favourable conditions, the resisting power of this microbe is not and cannot be as great as if it were grown under the most favourable conditions. (*b*) The substance which is to be considered a good disinfectant must be capable of acting germicidally in a short time, say five minutes. It is, for instance, known that carbolic acid (absolute phenol) as a half per cent. solution is capable of killing the typhoid bacillus in two hours' exposure, but no one would from such a result consider a one half per cent. solution of carbolic acid a suitable disinfectant. If a disinfectant claims to be considered a good disinfectant, useful for practical purposes, it must be capable of exerting its germicidal power in a reasonably quick time. I have taken five minutes as the limit, ten minutes is for some practical purposes—*e.g.*, in surgical operations, too long a time.

The result of the experiments which are detailed is stated as follows:

Chinosol solution, in the proportion of 1 Chinosol to 250 of water, is the weakest solution which shows an effect on staphylococcus aureus in five minutes' exposure, a little stronger—1 : 200 markedly affects it, and 1 : 150 acts reliably as germicide.

The bacillus coli that I experimented with is of somewhat higher resistance than the staphylococcus aureus, since with the former Chinosol 1 : 200 showed the first effect, with the latter this was noticed already with a solution of 1 : 250, Chinosol 1 : 150 acting for 5 minutes on our bacillus coli proved capable of killing the microbe.

Chinosol solution of the strength of 1 : 100 acting for 5 minutes on spores of anthrax, acts germicidally, but already in the strength of 1 : 150 shows a positive effect in 5 minutes, though not reliable.

Spores of bacillus anthracis can be kept in a five to six per cent. carbolic acid (absolute phenol) solution for 48 hours, without being in the least interfered with in their vitality, whereas Chinosol acts germicidally on spores of anthrrx in 5 minutes in solution of 1 : 100 or 1 per cent.

These properties, together with its perfect harmlessness and easy solubility, place Chinosol considerably above carbolic acid (absolute phenol) as a disinfectant.

HALIFAX DOCKING CASE.

Dear Sir,

In accordance with the undertaking given in the circular, we now enclose balance sheet and list of subscriptions, and hope that you will find space for it in an early issue.—Yours faithfully,

P. M. WALKER.

Receipts

	£	s.	d.
To Veterinary Profession, per list	103	6	6
Hackney Breeders, Dealers, etc.	40	8	0
Neighbouring Friends	6	10	0
S. Appleyard £20 0 0			
Paid Prosecutors' Costs 12 9 7	7	10	5
Bank Interest	0	18	8
	£158	13	7

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By W. H. Boocock (Solicitor)	80	11	5
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Whitley Booth (Printers)	5	2	0
Subscription to Halifax Technical School	2	2	0
" " Royal Infirmary	2	2	0
Preparing Statement, etc.	1	1	0
Balance in Halifax Joint Stock Bank	36	0	0
	£158	13	7

P. M. WALKER }
A. W. BRIGGS } Promoters of the Defence Fund.

Examined and found correct,
E. W. WILLIAMS, Accountant, Halifax.
18th Dec., 1897.

SUBSCRIPTION LIST.

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Mr. J. Wortley Axe	1	1	0
P. M. Walker	1	1	0
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G. E. Bowman	1	0	0
T. B. Goodall	1	1	0
B. H. Russell	1	0	0
G. Craik	1	1	0
Denby Cooper	0	10	0
Ed. Coleman	0	10	6
A. H. Farrow	0	10	0
W. W. Dollar	0	10	6
J. W. Dollar	0	10	6
C. A. Squair	0	5	0
Reeks & Son	0	10	0
H. B. Allen	0	10	0
Samuel Wharam	0	10	0
Joseph Abson	0	5	0
Arthur Blake	0	5	0
H. Hall (Man.)	0	10	6
T. A. Douglas	0	10	6
George Rossell	0	10	6
Henry Howse	0	10	6
Herbert Nixon	0	10	0
Powell & Son	0	10	0
Wm. Hunter	0	5	0
Jas. Mackinder	0	10	6
Hy. Middlehurst	0	10	6
W. E. Litt	0	10	0
J. C. Collings	0	10	6
James Blakeway	0	10	0
Jno. R. Carless	0	10	6
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J. W. Barling	0	10	0
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Walter Burt	0	10	6
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Sam. Chambers	0	5	0
R. C. Edwards	0	10	0
Abraham Green	0	10	0
W. A. Edgar	0	10	6
E. Faulkner	0	10	6
Percy Gregory	0	10	0
J. H. Wilson	0	4	0
Alf. Marston	0	5	0
A. Young	0	5	0
G. H. Parr	0	5	0
H. W. Robson	0	5	0
J. F. Simpson	0	10	6
Cheesman and Garry	0	10	6
Fred. Whittaker	0	10	6
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L. Butters	0	10	0
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G. W. Carter	0	10	6
Mr. Lewis Holl	0	5	0
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Joseph Pears	0	2	6
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Robt. Moore	0	10	6
J. H. Carter	0	10	6
W. S. Carless	0	10	6
T. S. Brigham	0	10	6
F. W. Watchorn	0	5	0
Joseph Gregory	0	10	6
Joseph Smith	0	5	0
John Hatch	0	10	0
A. E. Paley	0	5	0
Jno. Wright	0	5	0
F. B. O. Taylor	0	5	0
W. J. Anderton	0	10	6
E. J. Richardson	0	2	6
Joseph Sanderson	0	10	0
R. Stevenson	0	10	0
Jacob Howe	0	5	0
S. E. Holmans	0	10	6
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R. J. Keall	0	5	0
T. Hopkin	0	10	6
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W. F. Houston	0	10	0
John Rogerson	0	10	6
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Jos. Forgham	0	5	0
M. Clarkson	0	5	0
J. B. Collins	0	10	6
A. Millar	0	5	0
J. J. Martin	0	10	0
W. P. Nelder	0	10	6
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R. B. Beman	0	10	0
R. Hughes	0	10	6
J. C. Deville	0	5	0
John Blench	0	5	0
Henry Blunt	0	10	6
Richard Miller	0	5	0
F. W. S. Clough	0	10	0
Robt, Brydon	0	5	0
H. G. Hewetson	0	5	0
J. R. Kinsey	0	10	6
James O. Platt	0	5	0
Irving and Stephenson	0	10	0
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W. D. Simpson	0	3	6
Wm. Shipley	0	10	6
Arthur Gill	0	7	6
E. S. Gubbin	0	5	0
E. Nuttall	0	10	6
R. Roberts	0	5	0
W. Wadsworth	0	10	6
A. E. Payne	0	5	0
Sidney Villar	0	10	6
J. A. Bull	0	5	0
W. Ridgman	0	5	0
Edwin Taylor	0	10	6
W. R. Lewis	0	10	0
E. H. Leaeh	0	10	6
J. L. C. Jones	0	10	6

	£	s.	d.
Lansley & Emms	0	10	0
James McBryde	0	5	0
J. McKinna	0	5	0
G. Barker	0	10	0
R. E. White	0	10	6
E. Baker	0	10	6
F. Hobday	0	10	6
John H. Cooper	0	10	6
W. H. Bloye	0	10	6
	102	5	6

	£	s.	d.
	102	5	6
Friend, per Prof. Axe	1	1	0
Hackney Breeders Dealers, etc.	40	8	0
Friends	6	10	0
	£150	4	6

INSTRUCTION IN FARRIERY.

The Bath and West and Southern Counties Society has for some time past been conducting, on behalf of the Somerset County Council, a travelling school for the instruction in farriery of shoeing-smiths. On Friday, the 10th inst., there were prize competitions, confined to pupils who had attended a complete course of instruction at the school during its stay within the district comprising Highbridge, Weston-super-Mare, Banwell, Yatton, and Wrington. Mr. A. Wheatley, F.R.C.V.S., of Reading, acted as judge and examiner, and reported in very satisfactory terms of the competitors' work.

The Registration Committee of the Farriers Company admit the winners of first prizes in these competitions to the official register free of charge, on their satisfying the judges that they have a fair knowledge of the structure of the horse's foot, while other competitors who satisfy the judges of their competency are admitted on payment of the usual fees.

The school is supervised by the Society's Farriery Steward (Colonel Best), and the veterinary surgeon attached to it is Mr. G. H. Elder, M.R.C.V.S., of Taunton. The latter lectures to the classes upon the anatomy of the horse's foot, and upon other subjects connected with farriery, and acts as general adviser upon the work of the school. The practical instructor is Mr. W. B. Blackall, master smith, late of Coleshill, Highworth, Wilts, who, previous to his appointment to the post, had won twenty-one prizes and several high commendations at shoeing competitions held by the Bath and West and Southern Counties Society and other societies.

The school is now at Flax Bourton.—*The Live Stock Journal.*

A Horse Killed by Electricity.

An alarming accident occurred at West Hartlepool in connection with the electric tram service between that place and Hartlepool. The accident happened at a late hour, and happily at a time when the streets were cleared of the customary Saturday night crowd. Just about midnight, at a point in Church Street, opposite Messrs. Backhouse and Co's bank, one of the overhead wires conveying the electric current by which the tramcars receive their motive power from the generating station snapped and fell in front of a passing cab. The horse became entangled with the wire, and received the full force of the current of electricity. The animal was flung on to the tramlines in the middle of the roadway, and with such conductors beneath it and the heavily charged wire connected to its body, the fate of the poor creature was soon sealed. The animal is described as having been enveloped in a perfect blaze of fire. It was scorched and roasted to death, and presented a shocking appearance. The cabman received a severe shock when the horse fell and narrowly escaped being flung upon the wire. He, however, managed to scramble over the top of the cab and escape. Several men who attempted to help to get the horse away from the cab were injured by the electric current. Eventually the machinery was stopped and the current shut off.—*Hull News.*

A Sheep-Worrying Case.

Sheriff-Principal Smith has issued his decision in the appeal by the defender against the interlocutor of the Sheriff-Substitute in the action brought in Dumfries Sheriff Court by James Stevenson, farmer, in Nether Cairn, New Cumnock, against Thomas Hunter, lately farmer in Hall, Kirkconnel, now resident at Bath, for recovery of £75 2s. as compensation for damage caused to pursuer's flock by dogs. Mr. Campion found for pursuer in the full amount claimed with expenses. The Sheriff-Principal adheres to the Sheriff-Substitute's interlocutor, and finds the defender liable in the expenses of the appeal. His Lordship expresses himself as satisfied that the identity of the dogs has been fully established; and, while pointing out that it is now unnecessary to aver or prove negligence against the owner of the dog or other person made responsible by the statute, adds that there was evidence in this case to the effect that the two dogs in question were allowed a certain license in roaming and hunting together on the farms adjoining that of the defender. If farmers do not take better care of their dogs at a season when their neighbours' fields are full of lambs, they should rightly be held liable for negligence at common law apart from the statute.

CORRESPONDENCE.

PROFESSIONAL ADVERTISING.

Sir,

I send by this evening's post a Welsh newspaper containing an advertisement by a very eminent North Wales veterinary surgeon, of 30 years standing. I also send enclosed in this letter a roughly translated contents of his advertisement.—Yours truly,

ANTI-ADVERTISER

MAE Y CYFFERIAU CANLYNOL
I'W CAEL GAN
J. RUMSEY WILLIAMS,
VETERINARY SURGEON, M.R.C.V.S.L.,
CAERNARFON.

CONDITION POWDER i Geffylau at tostor coesau chwyddedig, ac at roddi 'stymog, 10c y pwys.

POWDWR er attal a rhagflaenu y Clwy Du nue Ddolnr Byr ar Wartheg a Defaid, 1s. y pwys.

POWDWR anffaeledin at Scothi Wyn mewn Lloi Sugno, 2s. 6c y dwsin. Post free.

POWDWR at ladd Llau ar Geffylau a Gwartheg, 1s y pwys.

POTELI at dori Colic ar Geffylau neu Wartheg, 1s 6c yr un.

CYFFERIAU ANFFAELEDIG at Fendio Llyffaint Melyn ar Wartheg.

ELI at Blistro, Curbs, Splints, Spavins, Ringbones, Sprains, &c., 2s y bocs.

OIL at fendio Briwia, 1s 6c yr hanner peint.

DUERETIC neu URINE BALLS, 4s y dwsin.

COUGH BALLS, 4s y dwsin.

BALLS at Purgio i Geffylau, 6s y dwsin.

POWDWRS i Wartheg ar ol dyfod a Lloi, 3s y dwsin.

POWDWRS at Purgio i Wartheg, 8c yr un neu 7s y dwsin.

ELI at Dethi Dolurus, 1s 6c y bocs. y313N

WRONG DESCRIPTION.

Dear Sir,

I notice in the Kelly's Directory of Yorkshire North and East Ridings, 1897, there appears in "trades" the name of a person as a "veterinary surgeon" who is not in any way qualified. He acts as assistant to his father, which is no doubt misleading to the public and gives them the idea he may be qualified in some way. Can't this have a remedy. Are the publishers responsible, or

the person so entered? I should like an answer, as such misrepresentation ought to be stopped.—Yours truly,
ENQUIRER.

[This sort of error is frequently complained of and the publishers deny responsibility, but usually offer to correct it. The person described always asserts that he did not so describe himself. Nothing can be done except to notify the publishers through the Secretary of the R.C.V.S.—ED.]

ARMY VETERINARY DEPARTMENT.

The staff of the column which recently moved into the Utman Khel country from Jelala under Commanding Brig.-Gen. Reid consisted, among others, of: medical officer, Surg.-Lieut.-Col. O'Connor; veterinary officer, Vet.-Lieut. Williams.

We learn from India that there is a proposal to transfer the control of the Hissar cattle farm from the Veterinary to the Army Remount Department, but before any decision is arrived at a committee composed of an officer of each department interested, with Vet.-Colonel Queripel as president, will meet and report.—*A. & N. Gazette.*

Veterinary Societies—Addresses.

Alterations for this list must be duly notified by the Secretaries

BOMBAY V.M.A.
Pres Major Jas. Mills, M.R.C.V.S.
Vice-Pres: Vety.-Lieut. F. S. H. Baldrey, M.R.C.V.S. A.V.D.
N. D. Dhakmarvala, Esq., G.B.V.C.
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N. Narsingrao, Esq., G.B.V.C
Hon. Sec. & Treas: V. E. Vakharia, Esq., G.B.V.C.

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Meetings, Second Friday of Feb., June, and October

CALCUTTA V.M.A.
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56 New Bond Street, W.
Hon. Sec. Mr F. C. Mahon, M.R.C.V.S.,
93 Huddleston-rd. Tufnell Park, N.
Meetings, First Thursday in each month, except August and September, 10 Red Lion Square, Holborn, at 7 p.m.

CENRTAL V.A. OF IRELAND.
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Pres: Mr. R. Howard, F.R.C.V.S., Thetford.
Hon. Sec.: Mr. W. Shipley, Jnr., Southtown, Gt. Yarmouth
Meetings, Second Tuesday, Feb. and July

GLASGOW V.M.S.
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116 Stephens-green-west, Dublin

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97A Oxford Street., Manchester
Meetings, 1st Thursday in March, June, Sept., & Dec.

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Hon. Sec: Mr. J. A. Robinson, M.R.C.V.S., Peterboro'
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Camden House, High St., West Bromwich
Meetings, Second Friday in Feb., & May.
Second Tuesday in August, November

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Treas: Mr. E. Faulkner, F.R.C.V.S., Manchester
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Hon. Sec: & *Treas*: Mr. Hugh Begg, M.R.C.V.S., East Kilbride

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Pres Mr. W. F. Greenhalgh, M.R.C.V.S.,
Brunswick Terrace, Leeds
Hon. Sec; Mr. A. McCarmick, M.R.C.V.S., Kirkstall-rd, Leeds
Meetings, Last Friday in Jan., April, July, and October.